

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Original) A method for scintillation suppression of video images comprising the steps of:

- (a) receiving a frame of pixels having intensity values;
- (b) identifying pixels in the received frame having scintillation noise;
- (c) modifying intensity values of pixels in the received frame, identified as having scintillation noise, to form a filtered frame of pixels;
- (d) counting the number of pixels modified in step (c); and
- (e) displaying the filtered frame of pixels, if the amount of pixels counted is less than a threshold value.

2. (Currently Amended) The method of claim 1 further including the step of receiving previous and present frames of pixels, wherein

step (c) further includes storing a previously filtered frame of pixels in a buffer, and modifying intensity values of pixels in the ~~the~~ presently received frame of pixels by using the ~~the~~ previously filtered frame of pixels stored in the buffer.

3. (Currently Amended) The method of claim 2 wherein modifying intensity values of pixels of the presently received frame of pixels further includes the step of:

substituting a pixel at a two-dimensional location of the presently received frame of pixels with another pixel at the same two-dimensional location of the previously filtered frame of pixels.

4. (Currently Amended) The method of claim 3 wherein the substituting the pixel of the presently received frame with the pixel of the previously received frame further includes the step of:

only substituting the pixel of the presently received frame, if the intensity value of the pixel is greater than a first predetermined threshold value.

5. (Currently Amended) The method of claim 4 wherein the substituting the pixel of the presently received frame with the pixel of the previously received frame further includes the step of:

only substituting the pixel, if the difference between the intensity value of the pixel of the presently received frame and the intensity value of the pixel of the previously received frame is greater than a second predetermined threshold value.

6. (Currently Amended) The method of claim 5 further including the step of:
dynamically adjusting at least one of the first and second predetermined threshold values on a frame by frame basis.

7. (Currently Amended) The method of claim 5 further including the step of:
setting the first predetermined threshold value greater than the second predetermined threshold value.

8. (Currently Amended) The method of claim 1 further including the steps of:
(f) setting a number of a ~~suspension-suspend~~ threshold;
(g) comparing the number of the ~~suspension-suspend~~ threshold to the number of pixels counted in step (d); and
(h) suspending step (c), if the number of pixels counted in step (d) is larger than the number of the ~~suspension-suspend~~ threshold.

9. (Currently Amended) The method of claim 8 wherein
setting the number of the ~~suspension-suspend~~ threshold is based on an amount of scene dynamics in the received frame of pixels.

10. (Currently Amended) The method of claim 8 further including the step of receiving previous and present frames of pixels, wherein

setting the number of the ~~suspension-suspend~~ threshold is based on an amount of pixels of ~~[[a]]~~ the previously received frame, modified in step (c), plus approximately 10% of the number of pixels substituted.

11. (Original) The method of claim 10 further including the step of:

storing a previously filtered frame of pixels in a buffer, and

step (e) includes displaying the previously filtered frame of pixels stored in the buffer, if step (h) suspends step (c).

12. (Currently Amended) A system for scintillation suppression comprising

a receiver for receiving a frame of pixels having intensity values,

a processor, coupled to the receiver, for

(a) identifying pixels in the received frame having scintillation noise, and

(b) modifying intensity values of pixels in the received frame identified as having scintillation noise, to form a filtered frame of pixels,

a counter, included in the processor, for counting the number of pixels modified by the processor in the filtered frame of pixels, and

a display for displaying the filtered frame of pixels formed by the processor,

wherein the display displays the filtered frame of pixels, if the amount of pixels counted by the counter is less than a threshold value, and

the display displays the received frame, if the amount of pixels counted by the counter is greater than the threshold value.

13. (Currently Amended) The system of claim 12 wherein

the receiver is configured to receive previous and present frames of pixels,

a first buffer is coupled to the processor for storing a previously filtered frame of pixels, and

the processor is configured to modify intensity values of ~~the~~[[a]] presently received frame of pixels based on the previously filtered frame of pixels stored in the first buffer.

14. (Original) The system of claim 13 wherein

the processor is configured to substitute a pixel at a two-dimensional location of the presently received frame of pixels with another pixel at the same two-dimensional location of the previously filtered frame of pixels.

15. (Original) The system of claim 14 wherein

the processor is configured to only substitute the pixel of the presently received frame, if the intensity value of the pixel is greater than a first predetermined threshold value.

16. (Original) The system of claim 14 wherein

the processor is configured to only substitute the pixel, if the difference between the intensity value of the pixel of the presently received frame and the intensity value of the pixel of the previously received frame is greater than a second predetermined threshold value.

17. (Currently Amended) The system of claim 14 wherein

the processor includes a ~~suspension-suspend~~ threshold number, and

a comparator for comparing the number of pixels substituted by the processor in the presently filtered frame of pixels with the ~~suspension-suspend~~ threshold number, and

the processor suspending the modification of intensity values of pixels in the presently received frame, if the comparator determines that the number of pixels substituted by the processor in the presently filtered frame of pixels is larger than the ~~suspension-suspend~~ threshold number.

18. (Currently Amended) The system of claim 17 wherein

the ~~suspension-suspend~~ threshold number is based on the number of pixels substituted in a previously filtered frame plus ~~approximately~~approximately 10% of the number of pixels substituted.

19. (Currently Amended) The system of claim 13 wherein

a second buffer is coupled to the processor for storing a previously received frame of pixels, in which the pixels are free-of any modification by the processor, and

the processor is configured to modify the presently received frame of pixels based on the previously received frame of pixels stored in the second buffer, and

~~the processor is configured to store the filtered frame of pixels in the first buffer.~~

20. (Canceled)

21. (New) The method of claim 1 wherein

step (d) further includes the step of counting the number of pixels identified in the same received frame having scintillation noise, and

step (e) further includes the step of displaying the same received frame, if the amount of pixels counted is greater than the threshold value.